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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,810	08/28/2003	Avinash Jain	030159	9973
23596 7590 04/15/2010 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
WONG, BLANCHE				
ART UNIT		PAPER NUMBER		
2476				
NOTIFICATION DATE		DELIVERY MODE		
04/15/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

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Office Action Summary

Application No.

10/651,810

Applicant(s)

JAIN ET AL.

Examiner

BLANCHE WONG

Art Unit

2476

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-19, 21-23 and 25-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16, 18, 23, 25-34 and 36 is/are allowed.
- 6) ☒ Claim(s) 17, 19, 21, 22, 35 and 37 is/are rejected.
- 7) ☒ Claim(s) 2-15 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Per interview dated 3/12/2010 regarding claim 17, the finality of office action dated 1/14/2010 has been withdrawn.
2. Applicant's arguments with respect to claims 2-17,21,23-33,35 and 37 have been considered but are moot in view of the new ground(s) of rejection.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

It is unclear how the title "... A Time-scalable Priority-based ..." reads on claim 17 because claim 17 cites buffer depth and transmit power.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 17,19,21,35,37** are rejected under 35 U.S.C. 102(e) as being anticipated by Jain et al. (U.S. Pat No. 7,630,321).

The applied reference has a common assignee and inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With regard to claims 17,19,21, Jain discloses

transmitting, by an apparatus (**mobile 404 in Fig. 4**), a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested ("**transmitting a rate request if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at a non-zero rate**", col. 3, lines 20-22) (See *Also* Rate Request 408 in Fig. 4);

receiving, by the apparatus (**mobile 404 in Fig. 4**), a rate assignment ("**determining a maximum transmission rate**", col. 3, line 38) (See *Also* Scheduling 412 in Fig. 4) responsive to the request for the rate ("**reported in a rate request message**", col. 3, line 40), the rate assignment indicating a schedule duration (SCH_PRD, col. 3, line 25) and a scheduled rate applicable for the scheduled duration ("**a maximum supportable transmission rate**", col. 3, line 41) (See *Also* RASSIGN(n) 418 in Fig. 4); and

transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the schedule duration at the scheduled rate (**Transmission in Fig. 4**) (*See Also* scheduling decision 412 in Fig. 4).

With regard to claims 35 and 37, Jain discloses

a controller (**mobile 404 in Fig. 4**) configured to generate a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested (“**transmitting a rate request if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at a non-zero rate**”, col. 3, lines 20-22) (*See Also* Rate Request 408 in Fig. 4);

an antenna (**mobile 404 in Fig. 4**);

a transmitter (**mobile 404 in Fig. 4**) configured to transmit the request for the rate via the antenna; and

a receiver (**BSC 402 in Fig. 4**) configured to receive a rate assignment (“**determining a maximum transmission rate**”, col. 3, line 38) (*See Also* Scheduling 412 in Fig. 4) responsive to the request for the rate (“**reported in a rate request message**”, col. 3, line 40), the rate assignment indicating a schedule duration (**SCH_PRD**, col. 3, line 25) and a scheduled rate applicable for the scheduled duration (“**a maximum supportable transmission rate**”, col. 3, line 41) (*See Also* RASSIGN(n) 418 in Fig. 4),

wherein the transmitter (**mobile 404 in Fig. 4**) is further configured to transmit data, the transmitted data responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate (**Transmission in Fig. 4**) (**See Also scheduling decision 412 in Fig. 4**).

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. **Claims 21 and 22** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21 and 22 recite to a computer-readable medium (CRM). However, the medium is not defined to exclude transitory media such as signals or transmission media (Signals are non-statutory subject matter, MPEP 2106.IV.A.1). Moreover, Specification discloses "... RAM memory, flash memory, ROM memory, EPROM memory, EEPROM memory, registers, hard disk, a removable disk, a CD-ROM, or any other form of storage medium known in the art." The broadest reasonable interpretation of such a medium includes transitory propagating signals.

Even if the CRM excludes transitory media, the Specification describes exemplary storage medium rather than a CRM. Specification also discloses a communication medium, not CRM.

The 101 rejection can be overcome if 1) the claim recites "non-transitory" medium and 2) the specification is amended to recite that the medium is "non-transitory" respectively.

Allowable Subject Matter

8. **Claims 16,18,23,25-34,36** are allowed.
9. **Claims 2-15,38** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claims 16,18,34,36, the prior art of record fails to anticipate or make obvious "receiving a rate request during a scheduling period; transmitting a rate assignment responsive to the rate request, the rate assignment indicate a scheduled duration and a scheduled rate ... wherein the scheduled rate determines how many minimum scheduled durations are in the scheduling duration; and receiving data during a minimum scheduled duration at the scheduled rate, wherein each minimum scheduled duration is less than or equal to the scheduling period, the scheduling period being an interval of time after transmission of the rate assignment and before the transmission of the next rate assignment."

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLANCHE WONG whose telephone number is (571)272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Blanche Wong/
Examiner, Art Unit 2476
April 5, 2010

/Salman Ahmed/
Primary Examiner, Art Unit 2476